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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

### Division of Oil, Gas & Mining


MICHAEL R. STYLER  
Executive Director

JOHN R. BAZA  
Division Director

### Inspection Report

### Minerals Regulatory Program

April 19, 2010

Reviewed: 

<b>Mine Name:</b> Reef Mine	<b>Permit Number:</b> S/015/0094
<b>Operator Name:</b> Castle Valley Stone	<b>Inspection Date:</b> April 14, 2010
<b>Inspector(s):</b> Wayne Western	<b>Time:</b> 10:45-11:30 AM
<b>Other Participants:</b> Jeff Sagers	<b>Mine Status:</b> ACT

Elements of Inspection	Evaluated	Comment	Enforcement
1. Permits, Revisions, Transfer, Bonds	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Public Safety (shafts, adits, trash, signs, highwalls)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Protection of Drainages / Erosion Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Deleterious Material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Roads (maintenance, surfacing, dust control, safety)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Concurrent Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Backfilling/Grading (trenches, pits, roads, highwalls, shafts, drill holes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Water Impoundments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Re-vegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Purpose of Inspection:

The inspection was conducted in response to a concern about waste material being pushed off a cliff.

### Inspection Summary:

1. The mine is bonded for \$25,200 for 5 acres. The bond renewal date is 08/03/2010. The permit boundaries are loosely shown on the permit boundary map. The Division recommends that the Operator submit a detailed permit boundary map so that the Division can tell the location of the permit boundaries. The Division also recommends that the Operator mark the permit boundaries.
2. The mine is a surface mine so there are no underground openings. The operation consists of using a trackhoe to break or scoop up rocks from the surface. No highways exist on site.
3. The Operator did push waste material over the cliff. One concern is that material could be washed down the drainage. The only drainages in the area appear to be ephemeral. Below the cliff, there is a flat area several hundred yards from a well defined ephemeral stream channel. The concern that waste material on the cliff could contribute to increased sediment load appear does not appear to be likely.
6. The Operator stated that they placed growth material on the waste material that has been push over the cliff as part of concurrent reclamation.
7. The Operator stated that one reason for pushing waste material over the cliff is to stabilize the area. Some of the cliffs are undercut. The waste material acts as a support so that the trackhoe will be stable during the first

cuts along the cliff face. The Operator likes to start at the cliff edge because the trackhoe has access to exposed layers of rock.

9. The Division recommends that the Operator salvage and store all soils. The mine area has little or no soil; some of the area has exposed bedrock. Because of the limited soil resources, the Division recommends that all soils be salvaged and stored for reclamation.

### **Conclusions and Recommendations:**

The Operator should provide the Division with a detailed map showing the location of the permit boundaries. While not required by rule, the Operator should also mark the permit boundaries. The Division will discuss the practice of shoving waste material over the cliff with John Blake of State Institutional Trust Lands.

**Inspector's Signature**

WHW

cc: Jeff Sagers, Castle Valley Stone

John Blake, SITLA

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*Wayne Walton 04/19/2010*



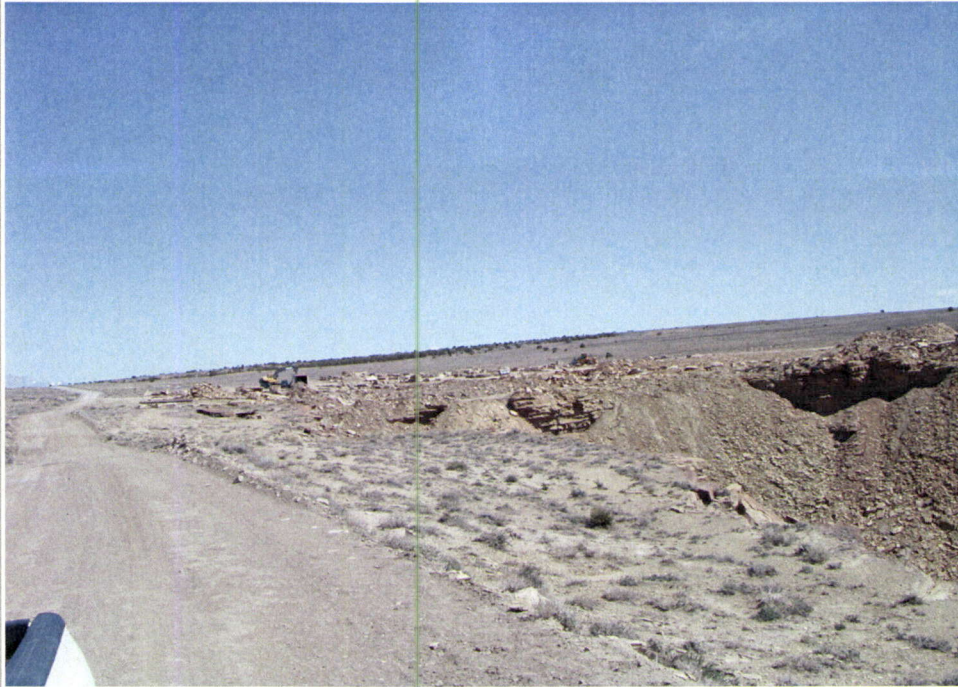


Waste material that has been pushed over the side. Some soil material has been placed on the waste material



Undercut cliff that the Operator wants to support with waste material





Another view of cliffs



Note the limited vegetation on undisturbed cliff.